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R. W. SPERRY (Introduced by K. S. LASHLEY)
Harvard Univ., Cambridge, Mass. Fixed persistence in the rat of spinal reflex patterns rendered extremely maladaptive by cross union of sensory nerves.

Nerves of the left hind foot were transected and crossed contralaterally to the peripheral stumps of the corresponding nerves of the right foot, so that after nerve regeneration the right foot was reinnervated only by nerves that originally had supplied the left foot. This led in all cases to erroneous contralateral localization of stimuli applied to the reinnervated foot and also to a reversal of hind limb reflexes initiated through the crossed sensory nerves. Although extremely maladaptive, the reversed reflex reactions nevertheless persisted without inhibition or correction by central nervous readjustment. A full printed account of the experiments is reported in J. Comp. Neur., vol. 78, pp. 59-90.